

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/511,728	01/19/2005	Jeppe Bastholm	66383-033-7	2568	
25269 7590 10/10/2007 DYKEMA GOSSETT PLLC FRANKLIN SQUARE, THIRD FLOOR WEST			EXAMINER		
			GLASS, ERICK DAVID		
1300 I STREE WASHINGTO		ART UNIT PAPER NUMBER 2837			
WASHINGTO	11, 50 2000				
			MAIL DATE	DELIVERY MODE	
			10/10/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

•	·		$\Box$			
		Application No.	Applicant(s)			
Office Action Summary		10/511,728	BASTHOLM, JEPPE			
		Examiner	Art Unit			
		Erick Glass	2837			
Period fo	The MAILING DATE of this communication ap or Reply	pears on the cover sheet with the	correspondence address			
WHIC - Exte after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REPLICATION OF THE MAILING INSIDE THE MAI	DATE OF THIS COMMUNICATIO .136(a). In no event, however, may a reply be to d will apply and will expire SIX (6) MONTHS from the, cause the application to become ABANDON	NN. imely filed  m the mailing date of this communication. IED (35 U.S.C. § 133).			
Status						
1)[	Responsive to communication(s) filed on	<u></u> .				
2a)⊠	This action is <b>FINAL</b> . 2b) ☐ This action is non-final.					
3)[	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
	closed in accordance with the practice under	Ex parte Quayle, 1935 C.D. 11, 4	153 O.G. 213.			
Disposit	ion of Claims					
4)	Claim(s) 1-7 is/are pending in the application.					
,—	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)[	Claim(s) is/are allowed.					
6)⊠	Claim(s) 1,2,5 and 6 is/are rejected.					
7)⊠	☑ Claim(s) <u>3,4,7</u> is/are objected to.					
<b>,8)</b> □	Claim(s) are subject to restriction and/	or election requirement.				
Applicat	ion Papers					
9)[	The specification is objected to by the Examin	ner.	•			
10)	The drawing(s) filed on is/are: a) ac	cepted or b) objected to by the	Examiner.			
	Applicant may not request that any objection to the	e drawing(s) be held in abeyance. S	ee 37 CFR 1.85(a).			
	Replacement drawing sheet(s) including the corre					
11)	The oath or declaration is objected to by the E	Examiner. Note the attached Office	e Action or form PTO-152.			
Priority	under 35 U.S.C. § 119	•				
	Acknowledgment is made of a claim for foreig  All b) Some * c) None of:	n priority under 35 U.S.C. § 119(	a)-(d) or (f).			
1. Certified copies of the priority documents have been received.						
	2. Certified copies of the priority documer					
	3. Copies of the certified copies of the pri	•	ved in this National Stage			
* (	application from the International Burea See the attached detailed Office action for a lis		vod			
•	see the attached detailed Office action for a is	st of the certified copies not recen	veu.			
•			•			
Attachmer		A) 🔲 Interniew Comme	0./PTO 412)			
	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948)	4) 🔲 Interview Summa Paper No(s)/Mail	Date			
3) 🔲 Info	mation Disclosure Statement(s) (PTO/SB/08) er No(s)/Mail Date	5)  Notice of Informal 6)  Other:	Patent Application			

Application/Control Number: 10/511,728

Art Unit: 2837

#### **DETAILED ACTION**

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 5, and 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Bastholm et al (6,509,705) in view Weimer et al (5,982,156).

With respect to claim 1, 5, and 6, Bastholm et al. discloses a drive unit for an actuator that drives a movable member (including an article of furniture) (col. 1, lines 3-9) comprising a dc motor having a rotor consisting of a plurality of coils connected to a commutator in connection with a set of brushes (col. 1, lines 3-5; inherent that a dc motor has a rotor with coils and a commutator that contacts brushes); a transmission that uses the motor to drive an adjustment means that adjusts an adjustable element (col. 4, lines 62-65); a power supply that supplies power to the drive unit, where the power supply comprises a transformer having a primary side connected to an ac source (col. 1, lines 6-7), and a secondary side having a recitification and smoothing means for connection to the dc motor (col. 1, lines 7-9); the drive unit comprises a first control to compensate for loss in the motor, thereby keeping the motor at a constant speed (cols. 3/4, lines 58-67/1-13; current feedback reduces power loss and keeps motor speed constant; and the drive unit also comprises a second control that removes voltage ripple, also keeping the motor at a constant speed (col. 3, lines 35-45; tapping current

Application/Control Number: 10/511,728

Art Unit: 2837

reduces voltage ripple; reduced power loss means the motor can stay at a constant speed).

Basthom et al. does not disclose the second period of time being shorter in duration than said first period of time.

Weimer et al discloses a control circuit that provides the same control wherein the second period of time being shorter in duration than said first period of time. With respect to figure 2, the first period relating to the inductor and transistor (L and 214) varies according to the voltage, while the second stage relates to the capacitor being shorter in length. It is commonly know in the art that the first period relating to the inductor and transistor of a boost circuit has a longer period than the second period relating to the capacitor.

With respect to claim 2, Bastholm et al. does not disclose the forward and power steps as claimed.

Weimer discloses a converter that uses forward step where the duty cycle is expressed in terms of a constant and. the input voltage (cols. 11/12, lines 20-67/1-49; Vref is the constant and V1 is the input voltage; therefore, arranging equation 4 around gets the relationship; a power step where the output voltage is expressed by the input voltage and the duty cycle (equation 5); and the forward step and the power step result in the output voltage being equal to the constant (equations 6 and 1 allow the output voltage to equal the constant Vreg. The motivation to implement the forward and power steps is to reduce the effects of transients (cols. 3/4, lines 66-67/1-3).

Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to implement the converter of Weimer et al. into the Bastholm et al. circuit, thereby providing the advantage of reducing transients, as taught by Weimer et al.

## Allowable Subject Matter

Claims 3 and 4 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

With respect to claims 3 and 4, the Prior Art does not disclose the specific relationship between the variables and constant as claimed.

### Response to Amendment

The amendment filed 7/26/2007 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: an astable timer having a duty cycle which is controlled by output voltage and adjusted by input voltage.

Applicant is required to cancel the new matter in the reply to this Office Action.

The applicant does not further argue the previous 35 U.S.C. 103 rejection of Bastholm and Weimer.

#### Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

Art Unit: 2837

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erick Glass whose telephone number is 571-272-8395. The examiner can normally be reached on 8-5 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on 571-272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

SUPERVISORY PATIENT EXAMINER

EG